

AMENDMENTS TO THE CLAIMS:

Claims 1-36 **(Cancelled)**

37. **(New)** A heat sink comprising:
fins formed of metal wires wound into coils, including a right-handed coil and a left-handed coil; and
a thermally conductive base plate retaining said fins;
wherein each of said right-handed coil and said left-handed coil has plural turns respectively constituting mutually aligned coil elements; and
wherein said right-handed coil and said left-handed coil are combined and flattened such that said coil elements are in close contact with each other, so as to form air gaps and contact parts.
38. **(New)** The heat sink set forth in claim 37, said contact parts of said coils are thermally coupled.
39. **(New)** The heat sink set forth in claim 37, wherein said fins are disposed relative to said base plate in a standing manner.
40. **(New)** The heat sink set forth in claim 39, wherein said base plate has a groove formed therein, and said fins are disposed in said groove in said standing manner.
41. **(New)** The heat sink set forth in claim 40, wherein said fins are thermally coupled to said groove in said base plate.
42. **(New)** The heat sink set forth in claim 37, wherein said fins have flat surfaces that are arranged parallel to said base plate.
43. **(New)** The heat sink set forth in claim 42, wherein void spaces are formed between said fins and said base plate, and said void spaces are filled with ferrite powder.

44. **(New)** The heat sink set forth in claim 37, wherein said metal wires are constituted by flat metal wires.

45. **(New)** The heat sink set forth in claim 37, wherein said right-handed coil and said left-handed coil are mutually intertwined.

46. **(New)** The heat sink set forth in claim 45, said contact parts of said coils are thermally coupled.

47. **(New)** The heat sink set forth in claim 45, wherein said fins are disposed relative to said base plate in a standing manner.

48. **(New)** The heat sink set forth in claim 47, wherein said base plate has a groove formed therein, and said fins are disposed in said groove in said standing manner.

49. **(New)** The heat sink set forth in claim 48, wherein said fins are thermally coupled to said groove in said base plate.

50. **(New)** The heat sink set forth in claim 45, wherein said fins have flat surfaces that are arranged parallel to said base plate.

51. **(New)** The heat sink set forth in claim 50, wherein void spaces are formed between said fins and said base plate, and said void spaces are filled with ferrite powder.

52. **(New)** The heat sink set forth in claim 45, wherein said metal wires are constituted by flat metal wires.

53. **(New)** A sheet-shaped heat sink comprising:
a base film with agglutinant; and

fins formed of metal wires wound into coils, including a right-handed coil and a left-handed coil, on said base film; and

wherein each of said right-handed coil and said left-handed coil has plural turns respectively constituting mutually aligned coil elements; and

wherein said right-handed coil and said left-handed coil are combined and flattened such that said coil elements are in close contact with each other, so as to form air gaps and contact parts.

54. **(New)** The sheet-shaped heat sink set forth in claim 53, wherein said right-handed coil and said left-handed coil are mutually intertwined.

55. **(New)** The sheet-shaped heat sink set forth in claim 54, wherein said metal wires are constituted by flat metal wires.

56. **(New)** The sheet-shaped heat sink set forth in claim 53, wherein said metal wires are constituted by flat metal wires.